

**A RESOLUTION  
BY CITY UTILITIES COMMITTEE**

**A RESOLUTION AUTHORIZING THE MAYOR TO ISSUE A NOTICE TO PROCEED TO CH2M HILL/WILLIAMS, RUSSELL & JOHNSON, JV, FOR FC-7619-03C, ANNUAL CONTRACT FOR ARCHITECTURAL AND ENGINEERING SERVICES, FOR THE PURPOSE OF PROVIDING DESIGN SERVICES TO ACCOMMODATE NEW SODIUM HYPOCHLORITE GENERATORS, ON BEHALF OF THE DEPARTMENT OF WATERSHED MANAGEMENT, IN AN AMOUNT NOT TO EXCEED FOUR HUNDRED THOUSAND EIGHT HUNDRED FIVE DOLLARS AND NO CENTS (\$400,805.00); ALL WORK WILL BE CHARGED TO AND PAID FROM FUND, ACCOUNT AND CENTER NUMBER 2J21 (WATER & WASTEWATER RENEWAL & EXTENSION) 524001 (CONSULTANT/PROFESSIONAL SERVICES) Q67J120394DA (ON-SITE SODIUM HYPOCHLORITE GENERATION); AND FOR OTHER PURPOSES.**

**WHEREAS,** the City of Atlanta ("City") entered into an agreement with CH2M Hill/Williams, Russell & Johnson, JV ("CH2M Hill"), for FC-7619-03C, Annual Contract for Architectural and Engineering Services, pursuant to Resolution 04-R-0381; and

**WHEREAS,** the Commissioner of the Department of Watershed Management requires Design Services to modify the existing bulk storage and delivery system to accommodate new sodium hypochlorite generators; and

**WHEREAS,** the Commissioner of the Department of Watershed Management and the Chief Procurement Officer have recommended issuing a notice to proceed with CH2M Hill to provide Design Services in an amount not to exceed Four Hundred Thousand Eight Hundred Five Dollars and No Cents (\$400,805.00).

**THE CITY COUNCIL OF THE CITY OF ATLANTA, GEORGIA, HEREBY RESOLVES,** that the Mayor is authorized to issue a Notice to Proceed to CH2M Hill/Williams, Russell & Johnson, JV ("CH2M Hill") for FC-7619-03C, for Architectural and Engineering Services, to provide Design Services to accommodate new sodium hypochlorite generators, in an amount not to exceed Four Hundred Thousand Eight Hundred Five Dollars and No Cents (\$400,805.00).

**BE IT FURTHER RESOLVED,** that the Chief Procurement Officer is directed to prepare an appropriate agreement to be executed by the Mayor.

**BE IT FURTHER RESOLVED,** that all contracted work will be charged to and paid from Fund, Account and Center Number 2J21 (Water & Wastewater Renewal & Extension) 524001 (Consultant/Professional Services) Q67J120394DA (On-Site Sodium Hypochlorite Generation).

**BE IT FINALLY RESOLVED**, that the Agreement will not be binding on the City and the City will incur no obligation or liability under it until it has been executed by the Mayor, attested to by the Municipal Clerk, approved as to form by the City Attorney and delivered to CH2M Hill.

**Part II: Legislative White Paper:**

**A. To be completed by Legislative Counsel:**

**Committee of Purview:** City Utilities

**Caption:** A RESOLUTION AUTHORIZING THE MAYOR TO ISSUE A NOTICE TO PROCEED TO CH2M HILL/WILLIAMS, RUSSELL & JOHNSON, JV, FOR FC-7619-03C, ANNUAL CONTRACT FOR ARCHITECTURAL AND ENGINEERING SERVICES, FOR THE PURPOSE OF PROVIDING DESIGN SERVICES TO ACCOMMODATE NEW SODIUM HYPOCHLORITE GENERATORS, ON BEHALF OF THE DEPARTMENT OF WATERSHED MANAGEMENT, IN AN AMOUNT NOT TO EXCEED FOUR HUNDRED THOUSAND EIGHT HUNDRED FIVE DOLLARS AND NO CENTS (\$400,805.00); ALL WORK WILL BE CHARGED TO AND PAID FROM FUND, ACCOUNT AND CENTER NUMBER 2J21 (WATER & WASTEWATER RENEWAL & EXTENSION) 524001 (CONSULTANT/PROFESSIONAL SERVICES) Q67J120394DA (ON-SITE SODIUM HYPOCHLORITE GENERATION); AND FOR OTHER PURPOSES.

**Council Meeting Date:** January 16, 2007

**Requesting Dept.:** Watershed Management

**B. To be completed by the department :**

**1. Please provide a summary of the purpose of this legislation (Justification Statement).**

Task Order- Contractual agreement between the City of Atlanta - DWM, and CH2MHill/WRJ, JV for the purpose of design services to modify the existing bulk storage and delivery system to accommodate new sodium hypochlorite generators, in an amount not to exceed \$400,805.00

**2. Please provide background information regarding this legislation.**

**3. If Applicable/Known:**

(a) **Contract Type (e.g. Professional Services, Construction Agreement, etc):** Professional Services

(b) **Source Selection:**

(c) **Bids/Proposals Due:**

- (d)     **Invitations Issued:**
- (e)     **Number of Bids:**
- (f)     **Proposals Received:**
- (g)     **Bidders/Proponents:**
- (h)     **Term of Contract:**

**4. Fund Account Center:** 2J21 524001 Q67J120394DA

**5. Source of Funds:**

**6. Fiscal Impact:** \$400,805.00

**7. Method of Cost Recovery:**

**This Legislative Request Form Was Prepared By:** wcanidate

## LEGISLATIVE SUMMARY

**TO: City Utilities**

### **CAPTION**

A RESOLUTION AUTHORIZING THE MAYOR TO ISSUE A NOTICE TO PROCEED TO CH2M HILL/WILLIAMS, RUSSELL & JOHNSON, JV, FOR FC-7619-03C, ANNUAL CONTRACT FOR ARCHITECTURAL AND ENGINEERING SERVICES, FOR THE PURPOSE OF PROVIDING DESIGN SERVICES TO ACCOMMODATE NEW SODIUM HYPOCHLORITE GENERATORS, ON BEHALF OF THE DEPARTMENT OF WATERSHED MANAGEMENT, IN AN AMOUNT NOT TO EXCEED FOUR HUNDRED EIGHT HUNDRED FIVE DOLLARS AND NO CENTS (\$400,805.00); ALL WORK WILL BE CHARGED TO AND PAID FROM FUND, ACCOUNT AND CENTER NUMBER 2J21 (WATER & WASTEWATER RENEWAL & EXTENSION) 524001 (CONSULTANT/PROFESSIONAL SERVICES) Q67J120394DA (ON-SITE SODIUM HYPOCHLORITE GENERATION); AND FOR OTHER PURPOSES.

**Committee Meeting Date:** January 9, 2007

**Council Meeting Date:** January 16, 2007

**Requesting Dept.:** Watershed Management

**Contract Type:** Professional Services RFP

**Advertisement:** October 26, 2003

**Bids/Proposals Due:** January 7, 2004

**Invitations Mailed:** 146

**Bids/Proposals Received:** 12

Arcadis/BPA-(Brindley Pieters & Associates) – Joint Venture  
Atlanta Architects & Engineers, Joint Venture  
Atlanta Services Group, a Joint Venture  
Infrastructure Partners-Joint Venture (B & Jackson/ HDR/  
Malcom Pirnie)  
Brown and Caldwell/Deloan Hampton & Associates/Long  
Engineering Inc. - Joint Venture  
CH2M Hill/Williams-Russell and Johnson – Joint Venture  
Earthtech/IMCo Joint Venture  
HTL - Harrington, Tetra Tech & Lowe-Joint Venture  
JP<sup>2</sup> (Jacobs, Prad, PBS&J) – Joint Venture  
Metcalf & Eddy/Cardozo Engineering-Joint Venture  
Parsons Brinckerhoff & Khafra-Joint Venture  
Shaw Environmental Inc. /AIM Partners, PLC- JV

**Bidders/Proponents:**

- (1) CH2M Hill/Williams-Russell and Johnson
- (2) Atlanta Services Group
- (3) JP<sup>2</sup> (Jacobs, Prad, PBS&J)
- (4) Shaw/ Aim, Joint Venture

- (5) Metcalf & Eddy/Cardozo Engineering, Joint Venture
- (6) Arcadis/Brindley Pieters & Associates, Joint Venture

**Contractor:**

CH2M Hill/Williams-Russell and Johnson – Joint Venture

**Estimated Value:**

\$400,805.00

**Scope Summary:**

THE SCOPE OF WORK CONSISTS OF PROVIDING DESIGN SERVICES TO MODIFY THE EXISTING BULK STORAGE AND DELIVERY SYSTEM TO ACCOMMODATE NEW SODIUM HYPOCHLORITE GENERATORS, IN AN AMOUNT NOT TO EXCEED \$400,805.00

**Background:**

Original executed on May 17, 2004, expired on May 16, 2006

A Ninety Day extension was executed on May 22, 2006 and expired August 17, 2006

Renewal Agreement No. 1 was executed on August 16, 2006 expires on August 15, 2007

**Evaluation Team:**

DPRCA, DWM, DPW, DPCD, OCC and Risk Management

**Term of Contract:**

Two (2) years with an option to renew for three (3) one (1) year periods

**Fund Account Centers:**

2J21 (WATER & WASTEWATER RENEWAL  
& EXTENSION) 524001  
(CONSULTANT/PROFESSIONAL  
SERVICES) Q67J120394DA (ON-SITE  
SODIUM HYPOCHLORITE GENERATION)

**Prepared By:**

Anthony Stanley

**Contact Number:**

404-330-6384

**Project  
Participation:**

CH2M Hill, Inc./Williams-Russell and Johnson, Inc. a  
JV (15 pts.)

Williams-Russell and Johnson	AABE	32%
C.E.R.M.	AABE	4%
Precision Engineering and Surveying, Inc.	AABE	4%
Desmear Systems, Inc.	AABE	3%
Cheeks/Hornbein & Associates	AABE	4%
Smith Real Estate Services, Inc.	FBE	4%
CSA Central, Inc.	HBE	3%

Eagle Environmental Group	FBE	2%
Neil Engineering	FBE	2%
RCS Enterprises, Inc.	FBE	2%
D. Clark Harris	FBE	2%
PEQ	FBE	3%
Clarification and Mediation	FBE	3%
<b>Participation Total</b>		<b>68%</b>

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SHIRLEY FRANKLIN  
MAYOR

**CITY OF ATLANTA**  
55 TRINITY AVENUE., SW, SUITE 5400, SOUTH BLDG.  
ATLANTA, GEORGIA 30303-0324  
OFFICE (404) 330-6081  
FAX (404) 658-7194

DEPARTMENT OF  
WATERSHED MANAGEMENT  
**ROBERT J. HUNTER**  
Commissioner

November 30, 2006

TO: Adam L. Smith, Chief Procurement Officer  
Department of Procurement

FROM: Robert J. Hunter, Commissioner  
Department of Watershed Management

RE: **LEGISLATIVE REQUEST**  
**TASK ORDER Under FC-7619-03C**  
**ON-SITE SODIUM HYPOCHLORITE GENERATION**  
***Contractor: CH2MHILL/WILLIAMS, RUSSELL, JOHNSON, JV***

Please prepare the appropriate legislation (Cycle 01) for the above referenced services. We anticipate services in an amount not to exceed \$400,805.00. Please find attached the scope of services and Requisition No. Q67J6002. The costs shall be charged to Fund, Account and Center No. 2J21 524001 Q67J120394DA.

If you have any questions concerning this matter, please feel free to contact Lee Hunt, at 404. 350.4952 or Willie Canidate, at 404.330.6335.

Your assistance in this matter is requested and appreciated.

SP:wc

c: Sheila Pierce, DWM  
George Barnes, DWM  
Lee Hunt, DWM  
Cathy Martin, DOP  
Maisha Land, DWM  
Willie Canidate, DWM  
Anthony Stanley  
File





CITY OF ATLANTA

SHIRLEY C. FRANKLIN  
MAYOR

55 TRINITY AVENUE, SUITE 5400  
ATLANTA, GEORGIA 30335-0312  
OFFICE (404) 330-6081

DEPARTMENT OF  
WATERSHED MANAGEMENT

ROBERT J. HUNTER  
COMMISSIONER

DEPARTMENT OF WATERSHED  
MANAGEMENT  
06 NOV 30 PM 3:33  
BUREAU OF ADMINISTRATION

**To:** Sheila C. Pierce, Deputy Commissioner  
Department of Watershed Management

**From:** George D. Barnes, P.E., Deputy Commissioner  
Department of Watershed Management

**Subject:** FC-7619-03C, CH<sub>2</sub>MHill/WRJ, JV – A/E Services Proposal  
On-Site Sodium Hypochlorite Generation

**Date:** November 29, 2006

Attached is a proposed scope and budget submitted by CH<sub>2</sub>MHill/WRJ, JV for A/E services required for the subject project as requested by the Department of Watershed Management

The proposed scope and budget has been reviewed by the DWM Project Manager, Lee Hunt and me. In our opinion the scope and budget is appropriate for the project and it is recommended that it be submitted to the Department of Procurement for authorization by the Mayor and City Council

It is recommended that the Resolution authorizing the work include language that the work is authorized in an amount not to exceed the \$400,805. This would give us some latitude to have a final amount to be authorized by Procurement that could be less if we later reduce the fee.

Adequate funds are available in 2J21 524001 Q67J120394DA.

If you have any questions or need any additional information please let me know.

cc: Chris Hebbard  
Lee Hunt  
Roger Smith

# CITY OF ATLANTA

CH2M HILL and Williams Russell and  
Johnson Inc., Joint Venture

Proposal to Provide Professional Engineering  
Services for the Design of the On-Site Sodium  
Hypochlorite Generator Systems at the City of  
Atlanta Hemphill and Chattahoochee Water  
Treatment Plants

October 2006



**CH2MHILL**

/



williams-russell and johnson, inc.  
engineers • architects • planners



**CH2MHILL**



williams-russell and johnson, inc.  
engineers • architects • planners

**CH2M HILL**

115 Perimeter Center Place NE

Suite 700

Atlanta, GA

30346-1278

Tel 770.604.9095

Fax 770.604.9183

October 27, 2006

Mr. Lee Hunt  
Department of Watershed Management  
City of Atlanta  
650 Bishop Street, N.W.  
Atlanta, Georgia 30318

Subject: Revised Proposal to Provide Professional Engineering Services for the Design of the On-Site Sodium Hypochlorite Generator Systems at the City of Atlanta Hemphill and Chattahoochee Water Treatment Plants

Dear Mr. Hunt:

The CH2M HILL and Williams Russell Johnson (WRJ) Joint Venture (JV) is pleased to submit this proposal to provide professional engineering Services for the design of the City of Atlanta (COA) On-Site Sodium Hypochlorite Generator Systems at the Hemphill and Chattahoochee Water Treatment Plants (WTPs).

## Introduction

The on-site sodium hypochlorite generation system design consists of modifying the existing bulk storage and delivery system in order to accommodate new sodium hypochlorite generators and the associated ancillary equipment. The on-site generation of sodium hypochlorite at water treatment facilities is an increasingly cost effective "state of the art" technology as utilities strive to minimize the quantities of hazardous chemicals stored on-site. By generating sodium hypochlorite at a treatment facility, a brine solution is stored on-site rather than a hazardous gaseous chlorine or a strong bleach solution. The brine solution is pumped to a sodium hypochlorite generator, where a 0.8% sodium hypochlorite solution is produced and subsequently dosed as an oxidant and to produce a free chlorine residual that provides disinfection to the treated water.

## Project Understanding

The on-site hypochlorite generation systems for both the Hemphill and Chattahoochee WTPs will be sized based on each WTP production capacity and the anticipated maximum dose that may be required. The actual production capacity will be defined and optimized in

the feasibility study based on the number of storage tanks provided and the level of system redundancy desired by the COA (e.g. number of generators to be provided, storage tank capacity, etc). It is anticipated that the total generation capacity will be 4,000 to 5,000 pounds per day (ppd) for the Hemphill WTP and approximately 3,000 ppd for the Chattahoochee WTP.

Also required at both WTPs will be regenerating water softeners, metering pumps, several large capacity brine solution tanks, and four dilution blowers, in addition to instrumentation and controls and electrical upgrades. The COA has also requested that the existing liquid bulk sodium hypochlorite tanks and piping be evaluated and modified as required so that it can be incorporated into the new treatment system.

The On-site Sodium Hypochlorite Generator System Project will include an initial feasibility study to justify the project which includes the following improvements and modifications to the existing bulk delivery systems and tanks:

- New On-site sodium hypochlorite generation equipment.
- New Disinfection Building to house and protect the new disinfection equipment. Special consideration will be given to facility dimensions and location to minimize impacts to existing underground utilities.
- New storage tanks to be located adjacent to building. An additional evaluation will be performed to consider using existing 12% bulk hypochlorite tanks as storage tanks for 0.8% hypochlorite solution or as emergency standby for disinfection.
- Modification of the existing bulk sodium hypochlorite delivery system piping to integrate the new generation system.
- The feasibility study will be in the form of a technical memorandum and will include estimated engineering and construction costs, annual operation and maintenance costs and annual costs of the continued purchase of sodium hypochlorite.

## **Scope of Work**

### **Task 1      Project Management**

Project Management activities will include the preparation of a work plan with instructions for project execution. Progress Meetings will be held approximately every 4 weeks with the COA to review project progress and to discuss activities to be conducted over the next several weeks. A list of anticipated deliverables is presented in Table 1 at the end of the scope of work discussion.

#### **1.1 Develop Project Work Plan/ Project Management Manual**

Using the Department of Watershed Management's Project Management Plan example, a project work plan will be developed to identify and charter the project team and outline their roles. The workplan will also include a project budget, schedule, and deliverables and quality assurance/quality control (QA/QC) procedures. In addition the project lines of

communication, staffing plan, project procedures and a safety plan will be contained within this manual.

## **1.2 Prepare Monthly Project Status Reports**

Monthly invoices and abbreviated status reports will be prepared and submitted monthly for the project. The monthly invoice will be prepared in a format that has been approved by COA's project manager and will include copies of subconsultant invoices and a transaction register to document direct expense charges, a copy of the receipts for all items invoiced in this category, and brief description of each persons role and activities performed during that period. Five (5) copies of the Monthly Project Status Reports will be submitted to the COA. One (1) copy will be in a 3-ring binder, four (4) copies will be stapled.

## **1.3 Progress Meetings**

Progress Meetings will be held approximately every 4 weeks with the COA to review project progress and to discuss activities to be conducted over the next several weeks. Generally, the project manager from CH2M HILL and WRJ will attend as well technical staff as needed.

# **Task 2 Preliminary Engineering Design Services**

## **2.1 Kickoff Meeting**

The project team will meet with COA stakeholders to discuss project objectives, critical success factors, environmental issues, specifications, schedule, and field services. Meeting notes will be prepared and distributed to attendees and other key stakeholders.

## **2.2 Feasibility Study**

A feasibility study will be developed to define the capacities of the system at each plant, update construction and operating costs compared to the existing liquid bulk hypochlorite system. The study will also include a financial analysis of the capital and operations and maintenance costs to confirm that an on-site chlorine generation system will provide a payback in costs to the COA and to justify the initial capital investment. The tasks included in this evaluation are to:

- Collect and review available drawings, previous surveys, construction plans, previous reports and studies, easement drawings and shop drawings provided by the COA files pertaining to the existing bulk sodium hypochlorite storage system and site plan drawings for both the Chattahoochee and Hemphill WTPs.
- Prepare an order of magnitude (+15%/-15%) constructions cost estimate.
- Prepare a technical memorandum that includes:
  - Basis of design for each facility at both the Chattahoochee and Hemphill WTPs
  - Estimated engineering and construction costs
  - Annual operation and maintenance costs and annual costs of the continued purchase of sodium hypochlorite.

- Determination of payback period for each facility based on savings achieved by not buying bulk liquid hypochlorite.
- Outline construction sequence and scenarios to permit uninterrupted feed of hypochlorite for disinfection during construction of new facilities.

### **2.3 Preliminary Design Engineering Report**

After the feasibility study is approved and the COA decides to proceed with the project, a preliminary design engineering report will be prepared that will include the following elements:

- Evaluate existing bulk hypochlorite storage tanks and specify replacements if needed.
- Locate new building locations for on-site generation facilities and develop a preliminary layout for each building to house the generation equipment and tanks.
- Identify electrical service requirements to each building and any new electrical services on equipment needed.
- Summary tables of process and unit process design criteria for all on-site hypochlorite generation system components and equipment to be provided in each building. This will also include a summary of all design assumptions and assumptions for geotechnical and survey benchmarks to be used.
- A preliminary design criteria summary for the On-Site Sodium Hypochlorite Generator Systems at the Hemphill and Chattahoochee WTPs. This will include a preliminary P&ID and electrical one-line diagram.
- Equipment data sheets and specifications.
- Schematically show routing of solution piping.
- Preliminary layout drawings for the mechanical equipment components of the on-site hypochlorite generation system.
- Preliminary architectural elevations and floor plans of each building and a description of the structural foundation requirements for the buildings.
- As a part of this evaluation, an update to the construction cost estimate developed in the Feasibility Study will be performed based on the designs developed in the preliminary design engineering report.
- Update construction sequence and operating interface requirements to implement the project.

### **2.4 Site Survey**

The site survey task will produce a detailed electronic base map of the existing areas that the new sodium hypochlorite generation systems will be constructed on for both the Chattahoochee and Hemphill WTPs. The based maps will be used as the background for

the plan and profile sheets for each design. An existing area of ½ acre or less is assumed for surveying requirements for each site. Major components of the field survey are:

- Topographic Surveys - all topographic and cultural features shall be surveyed to within 0.2 feet of their true horizontal location of each feature shown on the site map. The type of feature tied shall be identified in the field notes (i.e. tree drip line, rock outcrop, etc.).
- Spot elevations shall be measured and reported to the nearest 0.01 feet on hard surfaces (asphalt, concrete, face of building, foundation, utilities, etc.) and measured and reported to the nearest 0.1 feet on all other surfaces.
- Quality Control – final survey shall be certified and stamped by a Registered Land Surveyor in the State of Georgia.
- All utilities, above and below ground will be located horizontally and vertically. For utilities where specific vertical location information may not be available, information obtained from the utility on general installation depths will be clearly stated.
- Any baseline used for horizontal control shall be coordinated with past surveys at the treatment plant such that any baseline established for this project is the same as a baseline used in a past survey, or it can be converted back to the previous baseline, if necessary. All coordinates and elevations shall be shown in English units.

## **2.5 Site Visits to Representative Onsite Chlorine Generation Facilities**

JV will travel with COA staff to visit up to two (2) representative on-site chlorine generation facilities to view the operations, installed equipment and ask questions of WTP staff. A written summary of the inspections with highlights of applicable design information learned will be prepared and submitted to the COA.

## **Task 3 Final Design Engineering Services**

### **3.1 Onsite Chlorine Generation Design for the Hemphill and Chattahoochee WTPs**

Engineering drawings and technical specifications for Divisions 1-16 will be prepared and submitted to COA who will conduct bidding and construction of the project. This will include the On-site Sodium Hypochlorite Generations System designs for both Hemphill and Chattahoochee WTPs. Drawings will be delivered in AutoCAD format using CH2M HILL's standard file naming, layering, font, legend, standards, etc. Review and final sets will be half-size (11" x 17"). The technical specifications will be limited to applicable specifications in Division 1 through Division 16 and will be developed from COA's standard master specifications utilizing previous COA projects as guide documents as appropriate.

Two Design Review Workshops (a half day each) will be held with COA staff to review the design during the course of the final design. The workshops will be held at either the COA's, WRJ or CH2M HILL's offices. The JV will prepare a budget level estimate of construction cost at the completion of preliminary design. This estimate will be updated at the completion of the final design.

### 3.2 New Bulk Storage Tank Design

Engineering drawings and technical specifications will be developed for new hypochlorite bulk storage tanks to house 0.8% and possibly 12% to serve as a back-up supply. The existing bulk storage tanks may be used to store 0.8% hypochlorite but COA staff have indicated that some of these tanks are in need of replacement. The proposed design will include new tanks as required to store 0.8% hypochlorite and/or replacement of the existing tanks that can be used to store 0.8% solution or be used to store 12% as a back-up supply. The exact configuration and number of tanks to be replaced will be determined in the feasibility study.

### Task 4 Bid Phase Services

Bid phase services will be provided by the COA and the JV will provide services related to producing drawings for bidding (15 full size sets assumed) and to prepare addenda and technical specifications (Division 1- Division 16) to the COA. Additionally, one reproducible copy shall be provided, in full size, half size drawings, and electronic form, (AutoCAD for drawings, Microsoft Word for specifications). The JV will prepare the bid form and assist with any special conditions, if required. The COA will provide all general and supplementary conditions, Instructions to Bidders, Contract, Insurance Requirements and other front end documents.

**TABLE 1**  
Anticipated Deliverable

Task No.	Task Name	Client Deliverable
1.1	Develop Project Workplan and Management Manual	Project instructions
1.2	Prepare Monthly Project Status reports	Monthly status reports
2.1	Kick Off Meeting	Meeting notes
2.2	Feasibility Study	TM summarizing feasibility of project
2.3	Preliminary Design Engineering Report	Final Report
3	Final Design Engineering Services	Drawings and Technical Specifications (Divisions 1-16)
4	Bid Phase Services	Produce Full Size Drawings and respond to bid questions as needed.

## Assumptions

The major assumptions identified in the above scope of work are summarized below:

1. Existing geotechnical data will be provided by the COA. Approval of additional budget will be obtained from COA should there be a need to obtain additional geotechnical data.
2. The design will be based on the, state, and local building codes and standards in effect at the start of the project.



3. The design documents for both sites will be prepared for a single construction contract.
4. The existing bulk storage tank building will not require modification, unless the new generators are located as part of the existing facility. All necessary tanks will remain in their present locations and the new generation system will be connected as needed to the existing tanks.
5. It is assumed the new Disinfection Buildings that will house the new on-site chlorine generation equipment will be constructed of concrete block with brick veneer to match existing structures.
6. It is assumed that the existing electrical service and plant computer system will not need to be upgraded or modified for this project. Electrical and control system improvements will be limited to those associated with the On-site chlorine generation system and associated 0.8% bulk tanks.
7. It is assumed as part of the design that the Chattahoochee WTP system will require a new feeder from the Main Switchgear at the Utility, approximately 1600 feet.
8. It is assumed as part of the design that at the Hemphill WTP we will need to install electrical conductors and conduit a short distance, approximately 100 feet.
9. This project will be coordinated with an upcoming WTP I&C Automation project, currently being designed by CH2M Hill/WRJ. All electrical drawings shall be capable of being used for permit application by a contractor.
10. No local stormwater or other NPDES construction stormwater discharge permit is required for this project and it assumed that no additional stormwater BMP is required for the site as a result of the new buildings being added to the site.
11. The new Sodium Hypochlorite Generation Equipment Building will not include a restroom or laboratory, it will only be used for housing equipment. All required building permits will be obtained by the COA.
12. This proposal does not include the provision of Construction Management Services during the construction phase.
13. In addition, the COA will provide certain assistance to the JV in completion of the tasks identified, including, but not limited to the following:
  - A) Provide existing equipment catalog information, operation and maintenance manuals and record drawings.
  - B) The JV will not be responsible for payment of any permit fees.
  - C) Provide record drawings, previous surveys, utility drawings, easement drawings, or other information to assist in the identification and location of underground utilities and piping.
  - D) Perform excavations, as required, to identify locations of buried pipes and utilities that may pose a conflict to the new facilities.

## Joint Venture Project Team

This work will be performed in accordance with the terms and conditions of the agreement between the COA and CH2M HILL/Williams, Russell & Johnson (WRJ) - a JV, FC7619-04C executed May 17, 2004. The JV team, carefully selected by the JV Program Manager, is comprised of junior, mid-level, senior engineering and M/WBE consultant professionals highly qualified in this subject matter to deliver a quality product within the budgetary and schedule constraints. The project team organization chart is provided as Attachment A, and he proposed project manager's resume is attached as Attachment B.

## Schedule

The JV proposes to complete the scope of work stating from the notice to proceed in accordance with the schedule as summarized below in Table 2.

**TABLE 2**  
Estimated Schedule

Task No.	Task Name	Task Duration	Total Duration
2.2	Feasibility Study	6 weeks	6 weeks
2.3	Preliminary Design Engineering Report	8 weeks	14 weeks
3	Final Design	10 weeks	24 weeks
4	Bid Phase	24 weeks	48 weeks
	Construction	52 weeks	100 weeks

## Compensation

The COA will compensate the JV for the scope of services presented herein in accordance with the provisions of the JV contract FC7619-04C executed May 17, 2004, with a not to exceed cost of \$400,805. A breakdown of labor and expenses is provided in Attachment C. A Drawing Sheet list is provided as Appendix D. A summary of the cost breakout is provided in Table 3 below.

**TABLE 3**  
Scope of Services Cost Summary

Task No.	Task Name	Cost
1	Project Management	\$21,837
2	Preliminary Engineering Design Services	\$124,314
3	Final Design Engineering Services	\$236,948
4	Bid Phase Services	\$17,705
	Total	\$400,805

Thank you for the opportunity to submit this proposal for emergency response services.  
Please feel free to contact us with any questions or to request additional information.

Sincerely,

CH2M HILL/WRJ



Gerri Dickerson, P.E.  
Program Manager



Frederick Artis  
Deputy Program Manager

c: George Barnes/COA  
Steve Lavinder/CH2M HILL  
Mike Bennett/CH2M HILL  
Angela Roberts/CH2M HILL  
Michael Marino/CH2M HILL

**ATTACHMENT C**  
**Scope of Services Cost Summary**  
**Design of the On-Site Sodium Hypochlorite Generator Systems at the City of Atlanta Hemphill and Chattahoochee WTPs**

Task	Description	Engineer 8	Engineer 7	Engineer 6	Engineer 5	Engineer 4	Designer 4	3 Man Crew	Land Surveyor	Clerical/ Administrative Assistant	Labor Hrs	Labor Cost	Other Expenses	Total
Hourly Rate		\$174.74	\$150.14	\$123.11	\$100.13	\$83.46	\$92.00	\$173.88	\$97.96	\$55.96				
<b>1</b>	<b>Project Management</b>													
1.1	Develop Project Work Plan/Project Management Manual	4	4	16	0	0	0	0	0	8	32	\$ 3,717	\$ 20	\$ 3,737
1.2	Prepare Monthly Project Status Reports	0	18	27	0	0	0	0	0	54	99	\$ 9,048	\$ 120	\$ 9,168
1.3	Monthly Progress Meetings	18	18	18	0	0	0	0	0	12	66	\$ 8,735	\$ 197	\$ 8,932
	Sub-Total	22	40	61	0	0	0	0	0	74	197	\$ 21,501	\$ 337	\$ 21,837
<b>2</b>	<b>Preliminary Engineering Services</b>													
2.1	Kickoff Meeting	6	12	12	6	0	0	0	0	2	38	\$ 5,040	\$ 49	\$ 5,089
2.2	Feasibility Study	7	18	28	55	35	0	0	0	14	157	\$ 16,584	\$ 300	\$ 16,884
2.3	Preliminary Design Engineering Report	14	86	192	226	85	148	0	0	30	781	\$ 84,014	\$ 500	\$ 84,514
2.4	Site Survey	0	0	8	8	0	24	32	16	16	104	\$ 12,021	\$ -	\$ 12,021
2.5	Site Visits to Onsite Chlorine Generation Facilities	24	0	0	0	0	0	0	0	2	26	\$ 4,306	\$ 1,500	\$ 5,806
	Sub-Total	51	116	240	295	120	172	32	16	64	1106	\$ 121,965	\$ 2,349	\$ 124,314
<b>3</b>	<b>Final Design Engineering Services</b>													
3.1	Onsite Chlorine Generation Design for the Hemphill and Chattahoochee WTPs	15	336	436	530	195	427	0	0	193	2132	\$ 226,172	\$ 2,000	\$ 228,172
3.2	New Bulk Storage Tank Design	1	4	14	26	10	22	0	0	11	88	\$ 8,576	\$ 200	\$ 8,776
	Sub-Total	16	340	450	556	205	449	0	0	204	2220	\$ 234,748	\$ 2,200	\$ 236,948
<b>4</b>	<b>Bid Phase Services</b>													
4		8	16	25	55	0	30	0	0	10	144	\$ 15,705	\$ 2,000	\$ 17,705
	Sub-Total	8	16	25	55	0	30	0	0	10	144	\$ 15,705	\$ 2,000	\$ 17,705
	<b>Grand Total</b>	<b>97</b>	<b>512</b>	<b>776</b>	<b>906</b>	<b>325</b>	<b>651</b>	<b>32</b>	<b>16</b>	<b>352</b>	<b>3,667</b>	<b>\$ 393,919</b>	<b>\$ 6,886</b>	<b>\$ 400,805</b>

Task	Expense Description	Amount
1.1	Fed Ex	\$ 20
1.2	Fed Ex	\$ 120
1.3	Milage	\$ 197
2.1	Milage	\$ 49
2.2	Repro and Fed Ex	\$ 300
2.3	Repro and Fed Ex	\$ 500
2.5	Travel	\$ 1,500
3.1	Repro and Fed Ex	\$ 2,000
3.2	Repro and Fed Ex	\$ 200
4	Repro and Fed Ex	\$ 2,000
	<b>Total</b>	<b>\$ 6,886</b>

TRANSMITTAL FORM FOR LEGISLATION

TO: MAYOR'S OFFICE

ATTN: GREG PRIDGEON

Legislative Counsel (Signature): Megan S. Middleton

*M. S. Middleton*

Contact Number: 6207

Originating Department: Watershed Management

Committee(s) of Purview: City Utilities

Council Deadline: December 19, 2006

Committee Meeting Date(s): January 9, 2007 Full Council Date: January 16, 2007

Commissioner Signature

*R. M. Smith* 12.18.06

Chief Procurement Officer

*Adam Smith*

CAPTION

A RESOLUTION AUTHORIZING THE MAYOR TO ISSUE A NOTICE TO PROCEED TO CH2M HILL/WILLIAMS, RUSSELL & JOHNSON, JV, FOR FC-7619-03C, ANNUAL CONTRACT FOR ARCHITECTURAL AND ENGINEERING SERVICES, FOR THE PURPOSE OF PROVIDING DESIGN SERVICES TO ACCOMMODATE NEW SODIUM HYPOCHLORITE GENERATORS, ON BEHALF OF THE DEPARTMENT OF WATERSHED MANAGEMENT, IN AN AMOUNT NOT TO EXCEED FOUR HUNDRED THOUSAND EIGHT HUNDRED FIVE DOLLARS AND NO CENTS (\$400,805.00); ALL WORK WILL BE CHARGED TO AND PAID FROM FUND, ACCOUNT AND CENTER NUMBER 2J21 (WATER & WASTEWATER RENEWAL & EXTENSION) 524001 (CONSULTANT/PROFESSIONAL SERVICES) Q67J120394DA (ON-SITE SODIUM HYPOCHLORITE GENERATION); AND FOR OTHER PURPOSES.

FINANCIAL IMPACT (if any) \$400,805.00

Mayor's Staff Only

Received by Mayor's Office:

(date)

12.19.06

Reviewed by:

*[Signature]*

Submitted to Council:

(date)

12/20/06